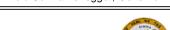
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017405 Address: 333 Burma Road **Date Inspected:** 04-Oct-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. Xu Tao **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG Segment & Bike Path

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 006852

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Bike path. The weld designations reviewed are as follows:

- 1. BK004A3-002-005, 010
- 2. BK004A5-002-004, 007, 112, 115, 118, 121, 125, 128, 131
- 3. BK004A3-012-005, 010
- 4. BK004A5-012-004, 007, 112, 115, 118, 121, 125, 128, 131

Magnetic Particle Testing (MT) – NWIT Document No's: 006858

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Bike Path. The weld designations reviewed are as follows:

1. BK004A2-011-016, 018

WELDING INSPECTION REPORT

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This QA Inspector observed the following work in progress:

Bay 19

This QA Inspector observed the following work in progress:

This QA inspector observed ZPMC qualified welding personnel identified as 062783 perform Flux Core Arc Welding (FCAW) welding on Bike path, weld joint identified as BK004A6-012-001 and 130. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2333-Tc-Ub-F.

This QA inspector observed ZPMC qualified welding personnel identified as 062752 perform FCAW welding on Bike path, weld joint identified as BK004A8-012-002 and 007. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2332-Tc-U4b-F.

This QA inspector observed ZPMC qualified welding personnel identified as 062732 perform FCAW welding on Bike path, weld joint identified as BK004A6-002-001 and 130. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2333-Tc-Ub-F.

This QA inspector observed ZPMC qualified welding personnel identified as 062762 perform FCAW welding on Bike path, weld joint identified as BK004A8-002-002 and 007. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2232-Tc-U4b-F.

This QA inspector observed ZPMC qualified welding personnel identified as 062732 perform FCAW welding on Bike path, weld joint identified as BK004A6-002-001 and 130. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2233-Tc-Ub-F.

This QA inspector observed ZPMC qualified welding personnel identified as 062762 perform FCAW welding on Bike path, weld joint identified as BK004A8-002-002 and 007. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2232-Tc-U4b-F.

This QA inspector observed ZPMC qualified welding personnel identified as 062808 perform FCAW welding on Bike path, weld joint identified as BK004A6-011-001 and 165. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2333-Tc-Ub-F.

This QA inspector observed ZPMC qualified welding personnel identified as 062755 perform FCAW welding on Bike path, weld joint identified as BK004A8-011-002 and 007. ZPMC QC is identified as Mr. Xu Tao. The

WELDING INSPECTION REPORT

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welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2332-Tc-U4b-F.

ZPMC personnel heat straightening OBG bike path member identified as BK006A-001-016/018. Distortion appeared to be caused by mishandling of the material. ZPMC Quality Control (QC) inspector identified as Mr. Xu Tao was present to monitor the heat straightening process. The heat straightening appeared to comply with HSR1 (B) number 9501.

ZPMC personnel heat straightening OBG bike path member identified as BK004A8-001-190/205. Distortion appeared to be caused by mishandling of the material. ZPMC Quality Control (QC) inspector identified as Mr. Xu Tao was present to monitor the heat straightening process. The heat straightening appeared to comply with HSR1 (B) number 9311.

Bay 16

This QA inspector observed ZPMC qualified welding personnel identified as 045250 perform FCAW welding on the Longitudinal Diaphragm Lifting lug of OBG Segment 13AW, weld joint identified LD3034-001-183 and 185. ABF QC is identified as Mr. Li Shi You. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U5-F.

This QA inspector observed ZPMC qualified welding personnel identified as 201583 perform FCAW welding on the Longitudinal Diaphragm Lifting lug of OBG Segment 13AW, weld joint identified LD3034-001-071 and 072. ABF QC is identified as Mr. Li Shi You. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-Tc-U5-F.

This QA inspector observed ZPMC qualified welding personnel identified as 048696 perform FCAW welding on the Longitudinal Diaphragm Lifting lug of OBG Segment 13AW, weld joint identified LD3031-001-044. ABF QC is identified as Mr. Li Shi You. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-Tc-U5-F.

This QA inspector observed ZPMC qualified welding personnel identified as 045143 perform FCAW welding on the Longitudinal Diaphragm Lifting lug of OBG Segment 13AW, weld joint identified LD3032-001-111 and 118. ABF QC is identified as Mr. Li Shi You. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-Tc-U5-F.

This QA inspector observed ZPMC qualified welding personnel identified as 201583 perform FCAW welding on the Longitudinal Diaphragm Lifting lug of OBG Segment 13BW, weld joint identified LD3032-001-055 and 057. ABF QC is identified as Mr. Li Shi You. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-Tc-U5-F.

Visual Inspection after Blast

Segment 11EE

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

This QA Inspector performed a preliminary random visual inspection on OBG Segment 11EE, after the grit blast of the interior components of the deck panel, floor beams and corner assemblies of this segment. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar, Vibin	Quality Assurance Inspector
Reviewed By:	McClendon, Timothy	QA Reviewer